FIELD SAMPLING DATA SHEET

Sample Type: Sediment | Sample Number: 010501 SBDS01SS | Date: 5/1/01

Project: Bradford Island | Project Number: 52-00080001.00 | Task: 00004

Weather Conditions: Overcast/rainy | Sample Matrix: Sediment

Comments:

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: -----

P.I.D./FID Calibration Date : -----

Soil Type: (USCS) GP

Description: Poorly graded sandy gravel, brown-gray, saturated (see field notebook for description).

Decontamination Method: N/A – Dedicated steel spoon, gloves

Sample Location: Sandblast Building Drain System #1 (easternmost drain)

Sample Depth:

Sample Time: 1730

Number of Sample Containers: 9

Analyses			
1.	VOC	2.	PCBs
3.	Butyltins	4.	TOC
5.	Metals	6.	NWTPH-HCID
7.	SVOCs	8.	

Other Field Measurements:

QA/QC samples: Duplicate, QA, MS/MSD**

Sampling Method: Grab

Grab: X Composite:

Sampler (s): B.P. McNamara/M. Novak

Signature:

**Collected primary & QA (both with the same label identification)

Collected duplicate sample #010501SBMS02SS

Invertebrate Sample Observations: N/A

General Comments: Sediment collected from catchbasin. Approximately 6" standing water. Had to remove catch basin lid and sediment blanket to collect the sample from within the catchbasin.

FIELD SAMPLING DATA SHEET

Sample Type: Sediment | Sample Number: 010501 SBDS03SS | Date: 5/1/01

Project: Bradford Island | Project Number: 52-00080001.00 | Task: 00004

Weather Conditions: Overcast/rainy | Sample Matrix: Sediment

Comments: Poor Sample – Mostly gravel

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS) GP-GW

Description: Poorly graded to well graded gravel (90%) with some sand (10%), poorly graded, brown-gray, saturated, very little fines.

Decontamination Method: None – Dedicated stainless steel spoon, gloves.

Sample Location: Sandblast Building

Drain System – Drain #2 (westernmost drain)

Sample Depth:

Sample Time: 1800

Number of Sample Containers: 2

Analyses	
1. VOC	2. PCBs
3. Butyltins	4. TOC
5. Metals	6. NWTPH-HCID
7. SVOCs	8.

Other Field Measurements: N/A

QA/QC samples: None

Sampling Method: Grab

Grab: X Composite:

Sampler (s): B.P. McNamara/M. Novak

Signature:

Water Quality Observations: N/A

Invertebrate Sample Observations: N/A

General Comments: Poor sample due to prevalence of gravel and pebbles. Could only fill 2 out of 3 sample containers. Sample mainly consisted of gravel that fell through catchbasin grate (no sediment blanket present). Sample not analyzed.

FIELD SAMPLING DATA SHEET

Sample Type: Sediment | Sample Number: 010502IW01SS | Date: 5/2/01

Project: Bradford Island | Project Number: 52-00080001.00 | Task: 00004

Weather Conditions: Overcast - 55°F | Sample Matrix: Sediment

Comments:

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS) GP-SP

Description: Poorly graded gravel and gravelly sand (gravel 80%, sand 15%, cobbles 5%); rounded cobbles up to 4" in diameter. Sand was brown-dark gray, saturated. Very little fines present.

Sample Location: Pile #2 - East Perimeter of pile

Sample Depth: ~ 35' below surface of river

Sample Time: 1040

Number of Sample Containers: jar, bag (grain size)

Analyses			
1.	8082	2.	Metals
3.	8081	4.	NWTPH-HCID
5.	8151	6.	9060
7.	8270	8.	

Other Field Measurements: N/A

QA/QC samples:

Sampling Method: Diver collected sample with spoon.

Decontamination Method: None – Dedicated stainless steel spoon

Grab: X Composite: N/A

Sampler (s): R. La Plant, B.P. McNamara, M. Novak

Signature:

Water Quality Observations: N/A

Invertebrate Sample Observations: N/A

General Comments: Diver proceeded to river bottom from the boat with sample containers and spoon. Diver placed sediment into containers and returned to boat with the collected sample.

FIELD SAMPLING DATA SHEET

Sample Type: Sediment | Sample Number: 010502IW02SS | Date: 5/2/01

Project: Bradford Island | Project Number: 52-00080001.00 | Task: 00004

Weather Conditions: Partly Sunny - 55°F | Sample Matrix: Sediment

Comments:

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS) GP-SP

Description: Poorly graded gravel and gravelly sand (gravel 80%, sand 15%, cobbles 5%) Rounded cobbles up to 4" in diameter. Sand was brown-dark gray, saturated. Very little fines present.

Decontamination Method: None – Dedicated stainless steel spoon.

Sample Location: Pile #2

Sample Depth: 40' below surface of river

Sample Time: 1030

Number of Sample Containers: 2 glass jars

Analyses	
1.	2.
3.	4.
5.	6.
7.	8.

Other Field Measurements: N/A

QA/QC samples:

Sampling Method: Diver collected sample with spoon

Grab: X Composite:

Sampler (s): R. La Plant, B.P. McNamara, M. Novak

Signature:

Water Quality Observations: N/A

Invertebrate Sample Observations: N/A

General Comments: Diver proceeded to river bottom from the boat with sample containers and spoon. Diver placed sediment into containers and returned to boat with the collected sample.

FIELD SAMPLING DATA SHEET

Sample Type: Sediment-Water Column Sample Number: 010502IW03WCS Date: 5/2/01

Project: Bradford Island Project Number: 52-00080001.00 Task: 00004

Weather Conditions: Sunny - 60°F Sample Matrix: Water Column, sediment, water

Comments: Collected duplicate, MS, MSD

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS) GP-SP

Description: Poorly graded gravel and gravelly sand (gravel 50%, sand 40%). Sand was brown-dark gray, saturated. Very little fines present (<10%).

Sample Location: Pile #1 - Within Pile at previous sample location 001219BIL03SD

Sample Depth: 12' below water surface

Sample Time: 1400

No. of Sample Containers: 1 glass jar, 4 1 gal. amber bottles

Analyses	
1.	2.
3.	4.
5.	6.
7.	8.

Other Field Measurements: N/A

QA/QC samples: Duplicate, MS, MSD

Sampling Method: Grab (sediment), peristaltic pump (water)

Decontamination Method: None – Dedicated stainless steel spoon for sediment, new PVC tubing (3/8" OD, ¼" ID) for water.

Grab: X Composite:

Sampler (s): B. Dye, B.P. McNamara, M. Novak

Signature:

Water Quality Observations: Collected duplicate sample #0105021W05WCS at 1410. Collected water column sediment sample #010502IW04SS.

Invertebrate Sample Observations: N/A

General Comments: Diver proceeded to river bottom from the boat with sample container, spoon, and peristaltic pump tubing. Diver placed sediment into container with spoon. Diver then agitated water column by hand and the peristaltic pump was used to bring water sample to surface for collection.

FIELD SAMPLING DATA SHEET

Sample Type: Water Column | Sample Number: 010502IW06WCS | Date: 5/2/01

Project: Bradford Island | Project Number: 52-00080001.00 | Task: 00004

Weather Conditions: Sunny - 65°F | Sample Matrix: Water Column (sediment and water)

Comments:

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS) GP-SP

Description: Poorly graded gravel and gravelly sand (gravel 60%, coarse sand 35%, fines 5%). Sand was brown-dark gray, saturated.

Sample Location: Pile #1 within pile and previous sample location 001219BIL01SD

Sample Depth: 28' below water surface

Sample Time: 1525

No. of Sample Containers: 1 glass jar, 1 gallon amber

Analyses	
1.	2.
3.	4.
5.	6.
7.	8.

Other Field Measurements: N/A

QA/QC samples: N/A

Sampling Method: Grab (sediment), peristaltic pump (water)

Decontamination Method: None – Dedicated stainless steel spoon for Sediment, new PVC tubing (3/8" OD, ¼" ID) for water.

Grab: X | Composite:

Sampler (s): B. Dye, B.P. McNamara, M. Novak

Signature:

Water Quality Observations: Slightly silty. Sand particles observed within PVC tubing. Used approximately 80' of tubing to reach sampling location (located 40' east of island). Gravel particle clogged hose @ about 10 feet from diver. Slow pumping due to this (filled approximately 0.75 gallons in 20-30 min as diver agitated sediment at river bottom).

Collected water column sediment sample #010502IW06SS.

Invertebrate Sample Observations: N/A .

General Comments: Diver proceeded to river bottom from the boat with sample container, spoon, and peristaltic pump tubing. Diver placed sediment into container with spoon. Diver then agitated water column by hand and the peristaltic pump was used to bring water sample to surface for collection.

FIELD SAMPLING DATA SHEET

Sample Type: Sediment | Sample Number: 010502IW07SS | Date: 5/2/01

Project: Bradford Island | Project Number: 52-00080001.00 | Task: 00004

Weather Conditions: Sunny - 65°F | Sample Matrix: Sediment

Comments:

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS) GP-SP

Description: Poorly to well graded gravel and gravelly sand (gravel 60%, coarse sand 35%, fines 5%). Sand was brown-dark gray, saturated.

Decontamination Method: N/A – Dedicated stainless steel spoon.

Sample Location: Pile #1 Perimeter

Sample Depth:

Sample Time: 1625

No. of Sample Containers: Glass jar

Analyses	
1.	2.
3.	4.
5.	6.
7.	8.

Other Field Measurements: N/A

QA/QC samples: None collected.

Sampling Method: Diver collected sample with spoon.

Grab: X Composite:

Sampler (s): B. Dye, B.P. McNamara, M. Novak

Signature:

Water Quality Observations: N/A

Invertebrate Sample Observations: N/A .

General Comments: Diver proceeded to river bottom from the boat with sample container and spoon. Diver placed sediment into container and returned to boat with the collected sample.

FIELD SAMPLING DATA SHEET

Sample Type: Sediment | Sample Number: 010502IW08SS | Date: 5/2/01

Project: Bradford Island | Project Number: 52-00080001.00 | Task: 00004

Weather Conditions: Sunny - 65°F | Sample Matrix: Sediment

Comments:

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS) GP-SP

Description: Poorly to well graded gravel and gravelly sand (gravel 60%, coarse sand 35%, fines 5%). Sand was brown-dark gray, saturated.

Decontamination Method: None – Dedicated stainless steel spoon.

Sample Location: Pile #1 - Perimeter

Sample Depth:

Sample Time: 1645

No. of Sample Containers: Glass jar

Analyses	
1.	2.
3.	4.
5.	6.
7.	8.

Other Field Measurements: N/A

QA/QC samples: None

Sampling Method: Diver collected sample with spoon.

Grab: X Composite:

Sampler (s): B. Dye, B.P. McNamara, M. Novak

Signature:

Water Quality Observations: N/A

Invertebrate Sample Observations: N/A .

General Comments: Diver proceeded to river bottom from the boat with sample container and spoon. Diver placed sediment into container and returned to boat with the collected sample.

FIELD SAMPLING DATA SHEET

Sample Type: Invertebrate - Tissue Sample Number: 010502IW09TS Date: 5/1/01 to 5/2/01

Project: Bradford Island Project Number: 52-00080001.00 Task: 00004

Weather Conditions: Intermittent Rain - 55°F Sample Matrix: Tissue (Bivalves)

Comments: Samples collected from 5/1/01 to 5/2/01

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS)

Description: See Invertebrate Sample observations below.

Decontamination Method: N/A

Sample Location: Pile #1. Bivalves collected from various locations throughout pile.

Sample Depth: Various – collected throughout pile

Sample Time: Various – collected from 5/1/01 to 5/2/01

No. of Sample Containers: Two resealable bags

Analyses	
1.	2.
3.	4.
5.	6.
7.	8.

Other Field Measurements: Measured length, width & weight.

QA/QC samples: None

Sampling Method: Grab by Diver

Grab: X Composite:

Sampler (s): D. Tsugawa, B.P. McNamara, M. Novak

Signature:

Water Quality Observations: N/A

Invertebrate Sample Observations: 63 total bivalves (corbicula flumiea) collected. Specimen shells were green-brown, were symmetrical, and were approximately the size of a quarter-dollar coin. Average sizes are as follows:

Length 21.22 millimeters

Width 14.38 millimeters

Weight: 7.87 grams

General Comments: Bivalves were collected over two days, while diver performed other tasks. Diver collected specimens from the river bottom and placed them (temporarily) in a dedicated plastic collection container. Diver returned the specimens to the boat where they were measured, wrapped in acetone-rinsed foil, triple-bagged, and placed on ice.

FIELD SAMPLING DATA SHEET

Sample Type: Water Column | Sample Number: 010503IW10WCS | Date: 5/3/01

Project: Bradford Island | Project Number: 52-00080001.00 | Task: 00004

Weather Conditions: Sunny - 65°F | Sample Matrix: Water Column

Comments:

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS) SW-SP.

Description: Well graded to poorly graded gravelly sand. Color is medium brown to dark grayish brown; saturated (standing water w/in container). Grain size: coarse medium sand 50%; silty (suspended in water) material 15%; gravel (fine to coarse - .20" – 1.5") 30%; organic material 5% (roots, tree twigs).

Decontamination Method: Dedicated stainless steel spoon for sediment, new PVC tubing (3/8" OD, ¼" ID) for water.

Sample Location: Goose Island – Background Location

Sample Depth: 20' below water surface

Sample Time: 0905

No. of Sample Containers: 1 glass jar & 1 amber gal. bottle

Analyses	
1.	2.
3.	4.
5.	6.
7.	8.

Other Field Measurements:

QA/QC samples: QA

Sampling Method: Grab and peristaltic pump

Grab: Composite:

Sampler (s): D. Tsugawa, B.P. McNamara, M. Novak

Signature:

Water Quality Observations: More silt present in this area of Goose Island. More fine material visible in PVC tubing. Collected water column sediment sample #0105031W10SS. Sediment is described above.

Invertebrate Sample Observations: N/A

General Comments: Diver proceeded to river bottom from the boat with sample container, spoon, and peristaltic pump tubing. Diver placed sediment into container with spoon. Diver then agitated water column by hand and the peristaltic pump was used to bring water sample to surface for collection.

FIELD SAMPLING DATA SHEET

Sample Type: Water Column | Sample Number: 010503IW11WCS | Date: 5/3/01

Project: Bradford Island | Project Number: 52-00080001.00 | Task: 00004

Weather Conditions: Sunny - 70°F | Sample Matrix: Sediment, Water

Comments:

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS) SP.

Description: Poorly graded gravelly sand. Color is dark brown; saturated (standing water within container). Coarse to medium sand predominates 60%; gravel is fine (0.25") 30%; water/fines 10%.

Sample Location: Pile #2 – within pile near lightning arrestor.

Sample Depth: 23' below water surface

Sample Time: 1020

No. of Sample Containers: 3 glass jars, one-gallon amber

Analyses	
1.	2.
3.	4.
5.	6.
7.	8.

Other Field Measurements:

QA/QC samples: Duplicate, MS, MSD

Sampling Method:

Decontamination Method: None - Dedicated stainless steel spoon for sediment, new PVC tubing (3/8" OD, ¼" ID) for water.

Grab: X Composite:

Sampler (s): D. Tsugawa, B.P. McNamara, M. Novak

Signature:

Water Quality Observations: Collected duplicate sample (#0105031W12SS) in one jar and MS/MSD in one jar (#0105031S11SS).

Invertebrate Sample Observations: N/A

General Comments: Diver proceeded to river bottom from the boat with sample container, spoon, and peristaltic pump tubing. Diver placed sediment into container with spoon. Diver then agitated water column by hand and the peristaltic pump was used to bring water sample to surface for collection.

FIELD SAMPLING DATA SHEET

Sample Type: Sediment | Sample Number: 010503IW13SS | Date: 5/3/01

Project: Bradford Island | Project Number: 52-00080001.00 | Task: 00004

Weather Conditions: Sunny - 70°F | Sample Matrix: Sediment

Comments:

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS) SP-GP .

Description: Poorly graded gravelly sand. Color is dark brown; saturated (standing water within container). Coarse to medium sand predominates 50-60%; gravel is fine (0.25") 40-50%; water/fines 5%. Standing water present within jar. Gravel size up to 1.5" in diameter.

Sample Location: Pile #2

Sample Depth: 35' below water surface

Sample Time: 1230

No. of Sample Containers: 1 Ziplock bag, 1 glass jar

Analyses	
1.	2.
3.	4.
5.	6.
7.	8.

Other Field Measurements: N/A

QA/QC samples: None

Sampling Method: Diver collected sample with spoon.

Decontamination Method: None - dedicated stainless steel spoon.

Grab: X Composite:

Sampler (s): Dennis Tsugawa., B.P. McNamara, M. Novak

Signature:

Water Quality Observations: N/A

Invertebrate Sample Observations: N/A

General Comments: Diver proceeded to river bottom from the boat with sample containers and spoon. Diver placed sediment into containers and returned to boat with the collected sample. Sediment within grain size (ziplock) bag is of larger nature (gravel 1.5").

FIELD SAMPLING DATA SHEET

Sample Type: Sediment | Sample Number: 010503IW14SS | Date: 5/3/01

Project: Bradford Island | Project Number: 52-00080001.00 | Task: 00004

Weather Conditions: Sunny - 70°F | Sample Matrix: Sediment

Comments:

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS) SP.

Description: Poorly graded gravelly sand. Color is dark brown; saturated (standing water within container). Coarse to medium sand predominates 60%; gravel is fine (0.25") 30%; water/fines 10%.

Decontamination Method: None - dedicated stainless steel spoon.

Sample Location: Pile #2 – Within Pile

Sample Depth: 30' below water surface

Sample Time: 1240

No. of Sample Containers: QA, Duplicate, MS & MSD

Analyses	
1.	2.
3.	4.
5.	6.
7.	8.

Other Field Measurements: N/A

QA/QC samples: QA, duplicate, MS & MSD

Sampling Method: Diver collected sample with spoon.

Grab: X Composite:

Sampler (s): D. Tsugawa, B.P. McNamara, M. Novak

Signature:

Water Quality Observations: N/A

Invertebrate Sample Observations: N/A

General Comments: Collected MS/MSD/QA samples. Collected sample duplicate #010503IW15SS. Diver proceeded to river bottom from the boat with sample containers and spoon. Diver placed sediment into containers and returned to boat with the collected sample.

FIELD SAMPLING DATA SHEET

Sample Type: Sediment | Sample Number: 010503IW16SS | Date: 5/3/01

Project: Bradford Island | Project Number: 52-00080001.00 | Task: 00004

Weather Conditions: Sunny - 70°F | Sample Matrix: Sediment

Comments:

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

Sample Location Pile #2 – west perimeter

Sample Depth: 38' below water surface

P.I.D/FID Calibration Standard: N/A

Sample Time: 1340

P.I.D./FID Calibration Date : N/A

No. of Sample Containers: 1 glass jar

Soil Type: (USCS) SP.

Description: Poorly graded gravelly sand. Color is dark brown; saturated (standing water within container). Coarse to medium sand predominates 60%; gravel is fine (0.25") 30%; water/fines 10%.

Analyses	
1.	2.
3.	4.
5.	6.
7.	8.

Other Field Measurements: N/A

QA/QC samples: N/A

Sampling Method: Diver collected sample with spoon.

Decontamination Method: None. Dedicated stainless steel. spoon.

Grab: X Composite:

Sampler (s): R. LaPlant., B.P. McNamara, M. Novak

Signature:

Water Quality Observations: N/A

Invertebrate Sample Observations: N/A

General Comments: Diver proceeded to river bottom from the boat with sample container and spoon. Diver placed sediment into container and returned to boat with the collected sample.

FIELD SAMPLING DATA SHEET

Sample Type: Sediment | Sample Number: 010503IW17SS | Date: 5/3/01

Project: Bradford Island | Project Number: 52-00080001.00 | Task: 00004

Weather Conditions: Sunny - 70°F | Sample Matrix: Sediment

Comments:

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS) SP.

Description: Poorly graded gravelly sand. Color is dark brown; saturated (standing water within container). Coarse to medium sand predominates 60%; gravel is fine (0.25") 30%; water/fines 10%.

Sample Location Pile #2 – Within Pile

Sample Depth: 35' below water surface

Sample Time: 1350

No. of Sample Containers: 1 glass jar

Analyses	
1.	2.
3.	4.
5.	6.
7.	8.

Other Field Measurements: N/A

QA/QC samples: None

Sampling Method: Diver collected sample with spoon.

Decontamination Method: None - dedicated stainless steel spoon.

Grab: X | Composite:

Sampler (s): R. LaPlant., B.P. McNamara, M. Novak

Signature:

Water Quality Observations: N/A

Invertebrate Sample Observations: N/A

General Comments: Diver proceeded to river bottom from the boat with sample container and spoon. Diver placed sediment into container and returned to boat with the collected sample.

FIELD SAMPLING DATA SHEET

Sample Type: Sediment | Sample Number: 010503SBDS18SS | Date: 5/3/01

Project: Bradford Island | Project Number: 52-00080001.00 | Task: 00004

Weather Conditions: Sunny - 70°F | Sample Matrix: Sediment

Comments:

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS) SP-SM.

Description: Poorly graded medium sand with some gravel. Dark brown/gray; saturated (standing water within containers). Medium sand predominates (70%) some gravel 10-20% and silt (10-15%). Gravel present up to 2" in diameter.

Decontamination Method: None - dedicated stainless steel spoon.

Sample Location Drain Outfall #2

Sample Depth: 8' and 14' (not enough sediment @ 8')

Sample Time: 1540

No. of Sample Containers: 1 glass jar, 2 liter plastic for TBT

Analyses	
2.	2.
4.	4.
6.	6.
8.	8.

Other Field Measurements: N/A

QA/QC samples: None

Sampling Method: Diver collected sample with spoon.

Grab: X Composite:

Sampler (s): R. LaPlant., B.P. McNamara, M. Novak

Signature:

Water Quality Observations:

Invertebrate Sample Observations: N/A

General Comments: Contains (sample does) algal-like material – greenish-brown, flaky, suspended). Diver moved to 14' below water surface (from 8') due to lack of sediment at 8'. Diver proceeded to river bottom from the boat with sample container and spoon. Diver placed sediment into container and returned to boat with the collected sample.

FIELD SAMPLING DATA SHEET

Sample Type: Sediment | Sample Number: 010503SBDS19SS | Date: 5/3/01

Project: Bradford Island | Project Number: 52-00080001.00 | Task: 00004

Weather Conditions: Sunny - 70°F | Sample Matrix: Sediment

Comments:

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS) SP-SM.

Description: Poorly graded medium sand with some gravel. Dark brown/gray; saturated (standing water within containers). Medium-sand predominates (70%) some gravel 10-20% and silt (10-15%). Gravel present up to 2" in diameter.

Decontamination Method: None - dedicated stainless steel spoon.

Sample Location Drain #1 (eastern drain outfall)

Sample Depth: 3' below water surface

Sample Time: 1605

No. of Sample Containers: 1 glass jar, 6 liter plastic for TBT

Analyses	
1.	2.
3.	4.
5.	6.
7.	8.

Other Field Measurements: N/A

QA/QC samples: MS, MSD, Duplicate

Sampling Method: Diver collected sample with spoon.

Grab: X | Composite:

Sampler (s): R. LaPlant., B.P. McNamara, M. Novak

Signature:

Water Quality Observations: Algal-like material present within water column. Material appears greenish-brown, 2 mm or smaller, planar-shaped, and is easily entrained with slight agitation.

Invertebrate Sample Observations: N/A

General Comments: Sample #010503SBDS20SS is the duplicate sample. Diver proceeded to river bottom from the boat with sample containers and spoon. Diver placed sediment into containers and returned to boat with the collected sample.

FIELD SAMPLING DATA SHEET

Sample Type: Tissue | Sample Number: 0105031W21TS | Date: 5/3/01

Project: Bradford Island | Project Number: 52-00080001.00 | Task: 00004

Weather Conditions: Sunny | Sample Matrix: Tissue (Bivalves)

Comments:

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS) .

Description: See Invertebrate Sample observations below

Decontamination Method: N/A

Sample Location Background location (Goose Island). .

Sample Depth: Various – from river bottom.

Sample Time: Various - collected on 5/3/1.

No. of Sample Containers: 1 resealable bag

Analyses	
1.	2.
3.	4.
5.	6.
7.	8.

Other Field Measurements: Measured length, width & weight

QA/QC samples: N/A

Sampling Method: Grab by diver

Grab: X Composite:

Sampler (s): D. Tsugawa, B.P. McNamara, M. Novak

Signature:

Water Quality Observations: N/A

Invertebrate Sample Observations: Collected 50 total bivalves (corbicula flumiea). Specimen shells were green-brown, were symmetrical, and were approximately the size of a quarter-dollar coin. Average sizes are as follows:

Length 24.25 millimeters

Width 16.39 millimeters

Weight: scale became inoperable

General Comments: Bivalves were collected over several hours while boat was anchored at Goose Island. Diver collected specimens from the river bottom and placed them (temporarily) in a dedicated plastic collection container. Diver returned the specimens to the boat where they were measured, wrapped in acetone-rinsed foil, triple-bagged, and placed on ice.

FIELD SAMPLING DATA SHEET

Sample Type: Invertebrate (clams) Sample Number: 0105031W23TS Date: 5/1/01 to 5/3/01

Project: Bradford Island Project Number: 52-00080001.00 Task: 00004

Weather Conditions: Sample Matrix: Tissue (Bivalves)

Comments:

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS) N/A .

Description: See Invertebrate Sample observations below.

Decontamination Method: N/A

Sample Location: Pile #2. Bivalves collected from various locations throughout pile.

Sample Depth: Various – collected throughout pile.

Sample Time: Various - collected from 5/1/1 to 5/3/1.

No. of Sample Containers: 3 resealable bags

Analyses	
1.	2.
3.	4.
5.	6.
7.	8.

Other Field Measurements: Measured length, width & weight

QA/QC samples: MS/MSD, Duplicate

Sampling Method: Grab by diver

Grab: X Composite:

Sampler (s): Ben Dye, B.P. McNamara, M. Novak

Signature:

Water Quality Observations: N/A

Invertebrate Sample Observations: Collected 215 total bivalves (corbicula flumiea). Specimen shells were green-brown, were symmetrical, and were approximately the size of a quarter-dollar coin. Average sizes are as follows:

Length 23.10 millimeters

Width 15.17 millimeters

Weight 7.70 grams

General Comments: Collected matrix spike (MS), matrix spike duplicate (MSD), and duplicate sample (sample #0105031W24TS). Samples collected by diver over course of three days (May 1-3, 2001). Diver collected specimens from the river bottom and placed them (temporarily) in a dedicated plastic collection container. Diver returned the specimens to the boat where they were measured, wrapped in acetone-rinsed foil, triple-bagged, and placed on ice.

FIELD SAMPLING DATA SHEET

Sample Type: Invertebrate - Tissue Sample Number: 0105031W22TS Date: 4/30/01 to 5/3/01

Project: Bradford Island Project Number: 52-00080001.00 Task: 00004

Weather Conditions: Rain - Intermittent Sample Matrix: Tissue (Bivalves)

Comments: Collected QA sample

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS) N/A .

Description: See Invertebrate Sample observations below.

Decontamination Method: N/A

Sample Location Pile #2 Bivalves collected from various locations throughout pile.

Sample Depth: Various – collected throughout pile

Sample Time: Various – samples collected from 4/30 to 5/3

No. of Sample Containers: 2 resealable bags

Analyses	
1.	2.
3.	4.
5.	6.
7.	8.

Other Field Measurements: Measured length, width & weight.

QA/QC samples: Collected QA sample

Sampling Method: Grab by diver

Grab: X Composite:

Sampler (s): R. LaPlant, B.P. McNamara, M. Novak

Signature:

Water Quality Observations: N/A

Invertebrate Sample Observations:

Collected 145 total bivalves (corbicula flumiea). Specimen shells were green-brown, were symmetrical, and were approximately the size of a quarter-dollar coin. Average sizes are as follows:

Length 26.56 millimeters

Width 16.47 millimeters

Weight 19.44 grams

General Comments: Collected QA sample #0105031W22TS. Samples collected by diver over course of four days. Diver collected specimens from the river bottom and placed them (temporarily) in a dedicated plastic collection container. Diver returned the specimens to the boat where they were measured, wrapped in acetone-rinsed foil, triple-bagged, and placed on ice.

FIELD SAMPLING DATA SHEET

Sample Type: Sediment | Sample Number: 010504SBDS24SS | Date: 5/4/01

Project: Bradford Island | Project Number: 52-00080001.00 | Task: 00004

Weather Conditions: Sunny, 65° F, windy | Sample Matrix: Sediment

Comments:

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS) SM.

Description: Silty sand. Color is brown to dark brown; wet, no cementation. Grain size: medium to coarse sand (65-75%), silt (5%), organic material (20-35%). Organic material consists of grass vegetation, roots, dead leaves. Thin veneer of this sediment (< 6") on top of gravel and rock.

Decontamination Method: None - dedicated stainless steel spoon used.

Sample Location Sandblast Building. Catch Basin #2 (western drain).

Sample Depth: < 6" below ground surface.

Sample Time: 1500

No. of Sample Containers:

Analyses	
1.	2.
3.	4.
5.	6.
7.	8.

Other Field Measurements: N/A

QA/QC samples: None

Sampling Method: Grab with spoon.

Grab: X Composite:

Sampler (s): B.P. McNamara

Signature:

Water Quality Observations: N/A

Invertebrate Sample Observations: N/A

General Comments: Poor sample collected from the drain on 5/1/01 (mostly gravel and pebbles with the catch basin. USACE (P. Huebschman) requested we collect this sample from the low area surrounding the catch basin.

FIELD SAMPLING DATA SHEET

Sample Type: Invertebrate - Tissue | Sample Number: 0105031W28TS | Date: 5/9/01 & 6/19/01

Project: Bradford Island | Project Number: 52-00080001.00 | Task: 00004

Weather Conditions: Sunny | Sample Matrix: Tissue (Crayfish)

Comments:

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS) N/A.

Description: See Invertebrate Sample observations below.

Decontamination Method: N/A

Sample Location: Pile #1

Sample Depth: Various – collected throughout pile

Sample Time: Various – samples collected on 5/9/01 & 6/19/01

No. of Sample Containers: 1 resealable bag

Analyses	
2.	2.
4.	4.
6.	6.
8.	8.

Other Field Measurements: Measured claw length, abdomen length & weight.

QA/QC samples: None

Sampling Method: Baited (with canned tuna) crayfish traps.

Grab: X Composite:

Sampler (s): B.P. McNamara, M. Novak, C.Moody

Signature:

Water Quality Observations: N/A

Invertebrate Sample Observations:

Collected 6 total Crayfish (pacifastacus sp,). Specimens were dark red-brown. Average sizes are as follows:

Weight: 10.8 grans

Length: 7.2mm

Claw: 3.1 mm

General Comments: Samples collected on 5/9/01 and traps were rebaited due to low specimen numbers. URS returned on 6/19/1 to retrieve traps again. Specimens were removed from traps, measured, wrapped in acetone-rinsed foil, triple-bagged, and placed on ice.

FIELD SAMPLING DATA SHEET

Sample Type: Invertebrate - Tissue Sample Number: 0105031W27TS Date: 5/9/01 & 6/19/01

Project: Bradford Island Project Number: 52-00080001.00 Task: 00004

Weather Conditions: Sunny Sample Matrix: Tissue (Crayfish)

Comments:

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS) N/A.

Description: See Invertebrate Sample observations below.

Decontamination Method: N/A

Sample Location: Pile #2

Sample Depth: Various – collected throughout pile

Sample Time: Various – samples collected on 5/9/01 & 6/19/01

No. of Sample Containers: 1 resealable bag

Analyses	
3.	2.
5.	4.
7.	6.
9.	8.

Other Field Measurements: Measured claw length, abdomen length & weight.

QA/QC samples: QA sample sent to USACE lab by Battelle Laboratory.

Sampling Method: Baited (with canned tuna) crayfish traps.

Grab: X Composite:

Sampler (s): B.P. McNamara, M. Novak, C.Moody

Signature:

Water Quality Observations: N/A

Invertebrate Sample Observations:

Collected 17 total crayfish (pacifastacus sp,). Specimens were dark red-brown. Average sizes are as follows:

Weight: 20.2 grams

Length: 9.0 mm

Claw: 4.5 mm

General Comments: Samples collected on 5/9/01 and traps were rebaited due to low specimen numbers. URS returned on 6/19/1 to retrieve traps again. Specimens were removed from traps, measured, wrapped in acetone-rinsed foil, triple-bagged, and placed on ice.

FIELD SAMPLING DATA SHEET

Sample Type: Invertebrate - Tissue Sample Number: 0105031W29TS Date: 5/9/01 & 6/19/01

Project: Bradford Island Project Number: 52-00080001.00 Task: 00004

Weather Conditions: Sunny Sample Matrix: Tissue (Crayfish)

Comments:

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS) N/A.

Description: See Invertebrate Sample observations below.

Decontamination Method: N/A

Sample Location Background – Goose Island

Sample Depth: Various – collected throughout pile

Sample Time: Various – samples collected on 5/9/01 & 6/19/01

No. of Sample Containers: 1 resealable bag

Analyses	
4.	2.
6.	4.
8.	6.
10.	8.

Other Field Measurements: Measured claw length, abdomen length & weight.

QA/QC samples: None.

Sampling Method: Baited (with canned tuna) crayfish traps.

Grab: X Composite:

Sampler (s): B.P. McNamara, M. Novak, C.Moody

Signature:

Water Quality Observations: N/A

Invertebrate Sample Observations:

Collected 3 total crayfish (pacifastacus sp,). Specimens were dark red-brown. Average sizes are as follows:

Weight: 28.8 grams

Length: 9.7 mm

Claw: 3.4 mm

General Comments: Samples collected on 5/9/01 and traps were rebaited due to low specimen numbers. URS returned on 6/19/1 to retrieve traps again. Specimens were removed from traps, measured, wrapped in acetone-rinsed foil, triple-bagged, and placed on ice.

FIELD SAMPLING DATA SHEET

Sample Type: Invertebrate - Tissue Sample Number: 0105031W26TS Date: 5/9/01 & 6/19/01

Project: Bradford Island Project Number: 52-00080001.00 Task: 00004

Weather Conditions: Sunny Sample Matrix: Tissue (Crayfish)

Comments:

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS) N/A.

Description: See Invertebrate Sample observations below.

Decontamination Method: N/A

Sample Location: Pile #2

Sample Depth: Various – collected throughout pile

Sample Time: Various – samples collected on 5/9/01 & 6/19/01

No. of Sample Containers: 3 resealable bags

Analyses	
5.	2.
7.	4.
9.	6.
11.	8.

Other Field Measurements: Measured claw length, abdomen length & weight.

QA/QC samples: MS/MSD, Duplicate 010509IW30TS

Sampling Method: Baited (with canned tuna) crayfish traps.

Grab: _____ Composite: X

Sampler (s): B.P. McNamara, M. Novak, C.Moody

Signature:

Water Quality Observations: N/A

Invertebrate Sample Observations:

Collected 33 total crayfish (pacifastacus sp,). Specimens were dark red-brown. Average sizes are as follows:

Weight: 18.2 grams

Length: 71.5 mm

Claw: 35.1 mm

General Comments: Samples collected on 5/9/01 and traps were rebaited due to low specimen numbers. URS returned on 6/19/1 to retrieve traps again. Specimens were removed from traps, measured, wrapped in acetone-rinsed foil, triple-bagged, and placed on ice.

FIELD SAMPLING DATA SHEET

Sample Type: SPMD | Sample Number: 010619RQ01 | Date: 6/19/01

Project: Bradford Island | Project Number: 52-00080001.00 | Task: 00004

Weather Conditions: Sunny | Sample Matrix: Semipermeable Membrane Device

Comments:

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS) N/A.

Description: Semipermeable Membrane Device

Sample Location: Pile #2 - West Perimeter

Sample Depth:

Sample Time: 1400

No. of Sample Containers: 1 Canister

Analyses	
6.	2.
8.	4.
10.	6.
12.	8.

Other Field Measurements:

QA/QC samples: Quality Assurance Sample

Sampling Method: 2 week deployment in river attached to anchor/buoy system

Decontamination Method: N/A

Grab: Composite: X

Sampler (s): B.P. McNamara, M. Novak, C.Moody

Signature:

Water Quality Observations: N/A

Invertebrate Sample Observations:

General Comments: Medium Biofouling (green brown organic file) on SPMD.

Quality Assurance Sample sent to USACE Laboratory by Battelle Laboratory

FIELD SAMPLING DATA SHEET

Sample Type: SPMD | Sample Number: 010619RQ05 | Date: 6/19/01

Project: Bradford Island | Project Number: 52-00080001.00 | Task: 00004

Weather Conditions: Sunny | Sample Matrix: Semipermeable Membrane Device

Comments:

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS) N/A.

Description: Semipermeable Membrane Device

Decontamination Method: N/A

Sample Location: Pile #1

Sample Depth:

Sample Time: 1535

No. of Sample Containers: 1 Canister

Analyses	
7.	2.
9.	4.
11.	6.
13.	8.

Other Field Measurements:

QA/QC samples:

Sampling Method: 2 week deployment in river attached to anchor/buoy system

Grab: Composite: X

Sampler (s): B.P. McNamara, M. Novak, C.Moody

Signature:

Water Quality Observations: N/A

Invertebrate Sample Observations:

General Comments: Medium Biofouling (green brown organic film) on SPMD.

FIELD SAMPLING DATA SHEET

Sample Type: SPMD | Sample Number: 010619RQ06 | Date: 6/19/01

Project: Bradford Island | Project Number: 52-00080001.00 | Task: 00004

Weather Conditions: Sunny | Sample Matrix: Semipermeable Membrane Device

Comments:

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

Sample Location: Background Location, Goose Island

Sample Depth:

P.I.D/FID Calibration Standard: N/A

Sample Time: 1600

P.I.D./FID Calibration Date : N/A

No. of Sample Containers: 1 Canister

Soil Type: (USCS) N/A .

Description: Semipermeable Membrane Device

Analyses	
8.	2.
10.	4.
12.	6.
14.	8.

Other Field Measurements:

QA/QC samples:

Sampling Method: 2 week deployment in river attached to anchor/buoy system

Decontamination Method: N/A

Grab: Composite: X

Sampler (s): B.P. McNamara, M. Novak, C.Moody

Signature:

Water Quality Observations: N/A

Invertebrate Sample Observations:

General Comments: Low Biofouling (green brown organic film) on SPMD.

FIELD SAMPLING DATA SHEET

Sample Type: SPMD | Sample Number: 010619RQ02 | Date: 6/19/01

Project: Bradford Island | Project Number: 52-00080001.00 | Task: 00004

Weather Conditions: Sunny | Sample Matrix: Semipermeable Membrane Device

Comments:

PID/FID Backgd: N/A / N/A ppm

Head Space N/A / N/A ppm

P.I.D/FID Calibration Standard: N/A

P.I.D./FID Calibration Date : N/A

Soil Type: (USCS) N/A.

Description: Semipermeable Membrane Device

Decontamination Method: N/A

Sample Location: Pile #2

Sample Depth:

Sample Time: 1600

No. of Sample Containers: 1 Canister

Analyses	
9.	2.
11.	4.
13.	6.
15.	8.

Other Field Measurements:

QA/QC samples: Field Blank, Field /Duplicate

Sampling Method: 2 week deployment in river attached to anchor/buoy system

Grab: Composite: X

Sampler (s): B.P. McNamara, M. Novak, C.Moody

Signature:

Water Quality Observations: N/A

Invertebrate Sample Observations:

General Comments: Medium Biofouling (green brown organic film) on SPMD.

Field Duplicate: 010619RQ03, Field Blank: 010619RQ04